

Application No. 10/531,627

Reply to Office Action

*AMENDMENTS TO THE CLAIMS*

RECEIVED  
CENTRAL FAX CENTER  
SEP 28 2006

1. (Currently Amended) A heat-sensitive lithographic printing plate precursor comprising a support having a hydrophilic surface and an oleophilic coating provided on the hydrophilic surface, said coating comprising

an infrared light absorbing agent, and

a polymer which comprises a phenolic monomeric unit, wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure  $-N=N-Q$ , wherein the  $-N=N-$  group is covalently bound to a carbon atom of the phenyl group, and wherein Q is an aromatic group.

2. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein Q is a group comprising at least one heteroatom.

3. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein said heteroatom is a nitrogen, an oxygen or a sulfur atom.

4. (Currently Amended) The lithographic printing plate precursor according to claim 1 wherein Q has the structure  $-A-(T)_n$

wherein A is a mono-cyclic 5- or 6-membered aromatic group or a 5- or 6-membered aromatic ring annelated with another ring system,

wherein n is an integer selected between 0 and the maximum available positions on the aromatic group A,

wherein each T group is selected from  $-SO_2-NH-R^1$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^1-R^2$ ,  $-NR^1-CO-R^4$ ,  $-NR^1-CO-NR^2-R^3$ ,  $-NR^1-CS-NR^2-R^3$ ,  $-NR^1-CO-O-R^1$ ,  $-O-CO-NR^1-R^2$ ,  $-O-CO-R^4$ ,  $-CO-O-R^4$ ,  $-CO-R^3$ ,  $-SO_3-R^1$ ,  $-O-SO_2-R^4$ ,  $-SO_2-R^1$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^1)(-O-R^2)$ ,  $-O-P(=O)(-O-R^1)(-O-R^2)$ ,  $-NR^1-R^2$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-N=N-R^4$ ,  $-CN$ ,  $-NO_2$ , a halogenide and  $-M-R^1$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

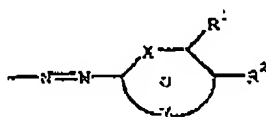
wherein  $R^1$ ,  $R^2$  and  $R^3$  are each independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

Application No. 10/531,627

Reply to Office Action

wherein  $R^4$  and  $R^5$  are selected from optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl and heteroaralkyl groups,  
or wherein at least two groups selected from each  $R^1$  to  $R^5$  together represent the necessary atoms to form a cyclic structure.

5. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the  $-N=N-Q$  group comprises the following formula



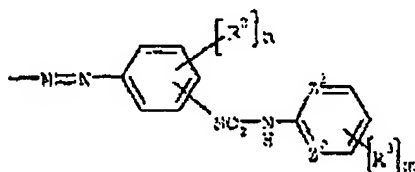
wherein X is  $CR^3$ ,  $NR^4$  or N,

wherein Y denotes the necessary atoms to form a 5- or 6-membered aromatic ring, said atoms being selected from the group consisting of  $CR^3$ ,  $NR^4$ , N, S and O,

wherein each  $R^1$ ,  $R^2$  and  $R^3$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^5$ ,  $-NH-SO_2-R^7$ ,  $-CO-NR^5-R^6$ ,  $-NR^5-CO-R^7$ ,  $-O-CO-R^7$ ,  $-CO-O-R^5$ ,  $-CO-R^5$ ,  $-SO_3-R^5$ ,  $-SO_2-R^5$ ,  $-SO-R^7$ ,  $-P(=O)(-O-R^5)(-O-R^6)$ ,  $-NR^5-R^6$ ,  $-O-R^5$ ,  $-S-R^5$ ,  $-CN$ ,  $-NO_2$ , halogen and  $-M-R^5$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^4$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^7$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  
or wherein at least two groups selected from each  $R^1$  to  $R^7$  together represent the necessary atoms to form a cyclic structure.

6. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the  $-N=N-Q$  group comprises the following formula



Application No. 10/531,627

Reply to Office Action

wherein  $Z^1$  and  $Z^2$  are independently selected from  $CR^1$  and  $N$ , wherein  $R^1$  is selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $n$  is 0, 1, 2, 3 or 4,

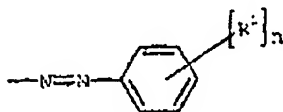
wherein  $m$  is 0, 1, 2 or 3,

wherein  $R^2$  and  $R^3$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^4$ ,  $-NH-SO_2-R^6$ ,  $-CO-NR^4-R^5$ ,  $-NR^4-CO-R^6$ ,  $-O-CO-R^6$ ,  $-CO-O-R^4$ ,  $-CO-R^4$ ,  $-SO_3-R^4$ ,  $-SO_2-R^4$ ,  $-SO-R^6$ ,  $-P(=O)(-O-R^4)(-O-R^5)$ ,  $-NR^4-R^5$ ,  $-O-R^4$ ,  $-S-R^4$ ,  $-CN$ ,  $-NO_2$ , halogen and  $-M-R^4$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^4$  and  $R^5$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^6$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^6$  together represent the necessary atoms to form a cyclic structure.

7. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $n$  is 0, 1, 2, 3, 4, or 5,

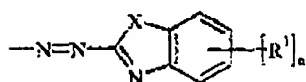
wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO^2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^2$  and  $R^3$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

Application No. 10/531,627

Reply to Office Action

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  
or wherein at least two groups selected from each  $R^1$  to  $R^4$  together represent the necessary atoms to form a cyclic structure.

8. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $n$  is 0, 1, 2, 3 or 4,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ ,

wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

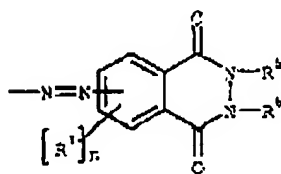
wherein  $X$  is O, S or  $NR^5$ ,

wherein  $R^2$ ,  $R^3$  and  $R^5$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^5$  together represent the necessary atoms to form a cyclic structure.

9. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the  $-N=N-Q$  group comprises the following formula



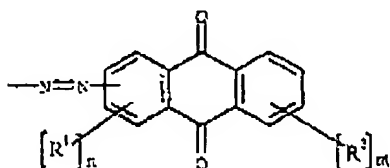
wherein  $n$  is 0, 1, 2 or 3,

Application No. 10/531,627

Reply to Office Action

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $R^1$  to  $R^4$  together represent the necessary atoms to form a cyclic structure, or wherein  $R^5$  and  $R^6$  together represent the necessary atoms to form a cyclic structure.

10. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the  $-N=N-Q$  group comprises the following formula



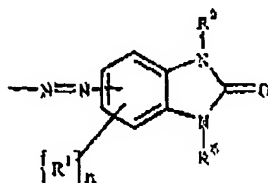
wherein n is 0, 1, 2 or 3,

wherein m is 0, 1, 2, 3 or 4, wherein each  $R^1$  and  $R^2$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^3$ ,  $-NH-SO_2-R^5$ ,  $-CO-NR^3-R^4$ ,  $-NR^3-CO-R^5$ ,  $-O-CO-R^5$ ,  $-CO-O-R^3$ ,  $-CO-R^3$ ,  $-SO_3-R^3$ ,  $-SO_2-R^3$ ,  $-SO-R^5$ ,  $-P(=O)(-O-R^3)(-O-R^4)$ ,  $-NR^3-R^4$ ,  $-O-R^3$ ,  $-S-R^3$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^3$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^3$  and  $R^4$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^5$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $R^1$  to  $R^5$  together represent the necessary atoms to form a cyclic structure.

Application No. 10/531,627

Reply to Office Action

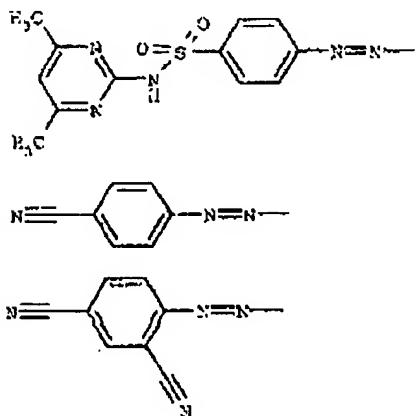
11. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2 or 3,

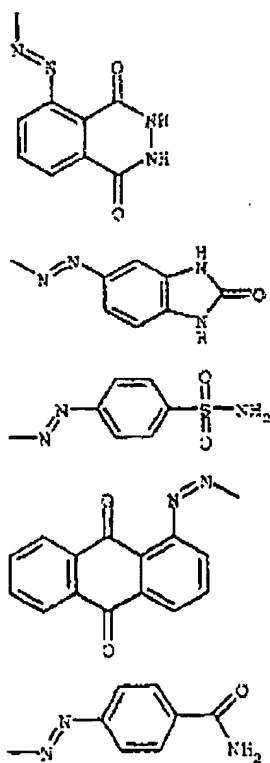
wherein each R<sup>1</sup> is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO<sub>2</sub>-NH-R<sup>2</sup>, -NH-SO<sub>2</sub>-R<sup>4</sup>, -CO-NR<sup>2</sup>-R<sup>3</sup>, -NR<sup>2</sup>-CO-R<sup>4</sup>, -O-CO-R<sup>4</sup>, -CO-O-R<sup>2</sup>, -CO-R<sup>2</sup>, -SO<sub>3</sub>-R<sup>2</sup>, -SO<sub>2</sub>-R<sup>2</sup>, -SO-R<sup>4</sup>, -P(=O)(-O-R<sup>2</sup>)(-O-R<sup>3</sup>), -NR<sup>2</sup>-R<sup>3</sup>, -O-R<sup>2</sup>, -S-R<sup>2</sup>, -CN, -NO<sub>2</sub>, a halogen and -M-R<sup>2</sup>, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup> and R<sup>6</sup> are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R<sup>4</sup> is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R<sup>1</sup> to R<sup>6</sup> together represent the necessary atoms to form a cyclic structure.

12. (Previously Presented) The lithographic printing plate precursor according to claim 1 wherein the -N=N-Q group comprises one of the following formulae:



Application No. 10/531,627

Reply to Office Action



13. (Previously Presented) The lithographic printing plate precursor according to claim 1, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

14. (Previously Presented) The lithographic printing plate precursor according to claim 1, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

15. (Previously Presented) The lithographic printing plate precursor according to claim 14, wherein said dissolution inhibitor is selected from the group consisting of  
an organic compound which comprises at least one aromatic group and a hydrogen bonding site,  
a polymer or surfactant comprising siloxane or perfluoroalkyl units, and  
mixtures thereof.

Application No. 10/531,627

Reply to Office Action

16. (Canceled)

17. (Previously Presented) The lithographic printing plate precursor according to claim 1, wherein said coating further comprising a latent Brønsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

18. (Canceled)

19. (Currently Amended) The lithographic printing plate precursor according to claim 2 wherein Q has the structure  $-A-(T)_n$  wherein A is a mono-cyclic 5- or 6-membered aromatic group or a 5- or 6-membered aromatic ring annelated with another ring system, wherein n is an integer selected between 0 and the maximum available positions on the aromatic group A, wherein each T group is selected from  $-\text{SO}_2-\text{NH}-\text{R}^1$ ,  $-\text{NH}-\text{SO}_2-\text{R}^4$ ,  $-\text{CO}-\text{NR}^1-\text{R}^2$ ,  $-\text{NR}^1-\text{CO}-\text{R}^4$ ,  $-\text{NR}^1-\text{CO}-\text{NR}^2-\text{R}^3$ ,  $-\text{NR}^1-\text{CS}-\text{NR}^2-\text{R}^3$ ,  $-\text{NR}^1-\text{CO}-\text{O}-\text{R}^1$ ,  $-\text{O}-\text{CO}-\text{NR}^1-\text{R}^2$ ,  $-\text{O}-\text{CO}-\text{R}^4$ ,  $-\text{CO}-\text{O}-\text{R}^4$ ,  $-\text{CO}-\text{R}^4$ ,  $-\text{SO}_3-\text{R}^1$ ,  $-\text{O}-\text{SO}_2-\text{R}^4$ ,  $-\text{SO}_2-\text{R}^1$ ,  $-\text{SO}-\text{R}^4$ ,  $-\text{P}(=\text{O})(-\text{O}-\text{R}^1)(-\text{O}-\text{R}^2)$ ,  $-\text{O}-\text{P}(=\text{O})(-\text{O}-\text{R}^1)(-\text{O}-\text{R}^2)$ ,  $-\text{NR}^1-\text{R}^2$ ,  $-\text{O}-\text{R}^2$ ,  $-\text{S}-\text{R}^2$ ,  $-\text{N}=\text{N}-\text{R}^4$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ , a halogenide and  $-\text{M}-\text{R}^1$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $\text{R}^1$ ,  $\text{R}^2$  and  $\text{R}^3$  are each independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $\text{R}^4$  and  $\text{R}^5$  are selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $\text{R}^1$  to  $\text{R}^5$  together represent the necessary atoms to form a cyclic structure.

20. (Currently Amended) The lithographic printing plate precursor according to claim 3 wherein Q has the structure  $-A-(T)_n$



Application No. 10/531,627

Reply to Office Action

wherein A is a mono-cyclic 5- or 6-membered aromatic group or a 5- or 6-membered aromatic ring annelated with another ring system,

wherein n is an integer selected between 0 and the maximum available positions on the aromatic group A,

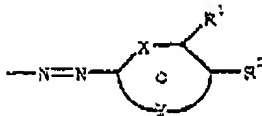
wherein each T group is selected from  $-\text{SO}_2\text{-NH-R}^1$ ,  $-\text{NH-SO}_2\text{-R}^4$ ,  $-\text{CO-NR}^1\text{-R}^2$ ,  $-\text{NR}^1\text{-CO-R}^4$ ,  $-\text{NR}^1\text{-CO-NR}^2\text{-R}^3$ ,  $-\text{NR}^1\text{-CS-NR}^2\text{-R}^3$ ,  $-\text{NR}^1\text{-CO-O-R}^1$ ,  $-\text{O-CO-NR}^1\text{-R}^2$ ,  $-\text{O-CO-R}^4$ ,  $-\text{CO-O-R}^4$ ,  $-\text{CO-R}^4$ ,  $-\text{SO}_3\text{-R}^1$ ,  $-\text{O-SO}_2\text{-R}^1$ ,  $-\text{SO}_2\text{-R}^4$ ,  $-\text{SO-R}^4$ ,  $-\text{P(=O)}(-\text{O-R}^1)(-\text{O-R}^2)$ ,  $-\text{O-P(=O)}(-\text{O-R}^1)(-\text{O-R}^2)$ ,  $-\text{NR}^1\text{-R}^2$ ,  $-\text{O-R}^2$ ,  $-\text{S-R}^2$ ,  $-\text{N=N-R}^4$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ , a halogenide and  $-\text{M-R}^1$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $\text{R}^1$ ,  $\text{R}^2$  and  $\text{R}^3$  are each independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $\text{R}^4$  and  $\text{R}^5$  are selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $\text{R}^1$  to  $\text{R}^5$  together represent the necessary atoms to form a cyclic structure.

21. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-\text{N=N-Q}$  group comprises the following formula



wherein X is  $\text{CR}^3$ ,  $\text{NR}^4$  or N,

wherein Y denotes the necessary atoms to form a 5- or 6-membered aromatic ring, said atoms being selected from the group consisting of  $\text{CR}^3$ ,  $\text{NR}^4$ , N, S and O,

wherein each  $\text{R}^1$ ,  $\text{R}^2$  and  $\text{R}^3$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-\text{SO}_2\text{-NH-R}^5$ ,  $-\text{NH-SO}_2\text{-R}^7$ ,  $-\text{CO-NR}^5\text{-R}^6$ ,  $-\text{NR}^5\text{-CO-R}^7$ ,  $-\text{O-CO-R}^7$ ,  $-\text{CO-O-R}^5$ ,  $-\text{CO-R}^5$ ,  $-\text{SO}_3\text{-R}^5$ ,  $-\text{SO}_2\text{-R}^5$ ,  $-\text{SO-R}^7$ ,  $-\text{P(=O)}(-\text{O-R}^5)(-\text{O-R}^6)$ ,  $-\text{NR}^5\text{-R}^6$ ,  $-\text{O-R}^5$ ,  $-\text{S-R}^5$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ , halogen and  $-\text{M-R}^5$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

Application No. 10/531,627

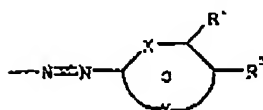
Reply to Office Action

wherein  $R^4$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^7$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^7$  together represent the necessary atoms to form a cyclic structure.

22. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-N=N-Q$  group comprises the following formula



wherein X is  $CR^3$ ,  $NR^4$  or N,

wherein Y denotes the necessary atoms to form a 5- or 6-membered aromatic ring, said atoms being selected from the group consisting of  $CR^3$ ,  $NR^4$ , N, S and O,

wherein each  $R^1$ ,  $R^2$  and  $R^3$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^5$ ,  $-NH-SO_2-R^7$ ,  $-CO-NR^5-R^6$ ,  $-NR^5-CO-R^7$ ,  $-O-CO-R^7$ ,  $-CO-O-R^5$ ,  $-CO-R^5$ ,  $-SO_2-R^5$ ,  $-SO_2-R^5$ ,  $-SO-R^7$ ,  $-P(=O)(-O-R^5)(-O-R^6)$ ,  $-NR^5-R^6$ ,  $-O-R^5$ ,  $-S-R^5$ ,  $-CN$ ,  $-NO_2$ , halogen and  $-M-R^5$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^4$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

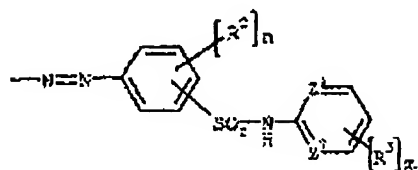
wherein  $R^7$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^7$  together represent the necessary atoms to form a cyclic structure.

23. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-N=N-Q$  group comprises the following formula

Application No. 10/531,627

Reply to Office Action



wherein  $Z^1$  and  $Z^2$  are independently selected from  $CR^1$  or N,

wherein  $R^1$  is selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $n$  is 0, 1, 2, 3 or 4,

wherein  $m$  is 0, 1, 2 or 3,

wherein  $R^2$  and  $R^3$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

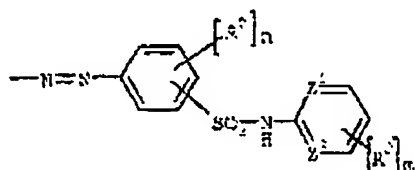
$-SO_2-NH-R^4$ ,  $-NH-SO_2-R^6$ ,  $-CO-NR^4-R^5$ ,  $-NR^4-CO-R^6$ ,  $-O-CO-R^6$ ,  $-CO-O-R^4$ ,  $-CO-R^4$ ,  $-SO_3-R^4$ ,  $-SO_2-R^4$ ,  $-SO-R^6$ ,  $-P(=O)(-O-R^4)(-O-R^5)$ ,  $-NR^4-R^5$ ,  $-O-R^4$ ,  $-S-R^4$ ,  $-CN$ ,  $-NO_2$ , halogen, and  $-M-R^4$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^4$  and  $R^5$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^6$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^6$  together represent the necessary atoms to form a cyclic structure.

24. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $Z^1$  and  $Z^2$  are independently selected from  $CR^1$  and N,

wherein  $R^1$  is selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

Application No. 10/531,627

Reply to Office Action

wherein n is 0, 1, 2, 3 or 4,

wherein m is 0, 1, 2 or 3,

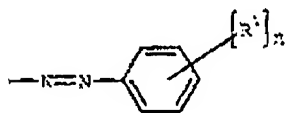
wherein  $R^2$  and  $R^3$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^4$ ,  $-NH-SO_2-R^6$ ,  $-CO-NR^4-R^5$ ,  $-NR^4-CO-R^6$ ,  $-O-CO-R^6$ ,  $-CO-O-R^4$ ,  $-CO-R^4$ ,  $-SO_3-R^4$ ,  $-SO_2-R^4$ ,  $-SO-R^6$ ,  $-P(=O)(-O-R^4)(-O-R^5)$ ,  $-NR^4-R^5$ ,  $-O-R^4$ ,  $-S-R^4$ ,  $-CN$ ,  $-NO_2$ , halogen and  $-M-R^4$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^4$  and  $R^5$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^6$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^6$  together represent the necessary atoms to form a cyclic structure.

25. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-N=N-Q$  group comprises the following formula



wherein n is 0, 1, 2, 3, 4, or 5,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ ,

wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^2$  and  $R^3$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

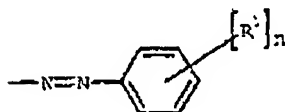
wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

Application No. 10/531,627

Reply to Office Action

or wherein at least two groups selected from each  $R^1$  to  $R^4$  together represent the necessary atoms to form a cyclic structure.

26. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $n$  is 0, 1, 2, 3, 4, or 5,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ ,

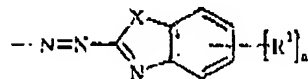
wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^2$  and  $R^3$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^4$  together represent the necessary atoms to form a cyclic structure.

27. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $n$  is 0, 1, 2, 3 or 4,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ ,

wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

Application No. 10/531,627

Reply to Office Action

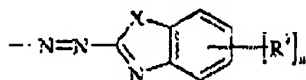
wherein X is O, S or NR<sup>5</sup>,

wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>5</sup> are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R<sup>4</sup> is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R<sup>1</sup> to R<sup>5</sup> together represent the necessary atoms to form a cyclic structure.

28. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2, 3 or 4,

wherein each R<sup>1</sup> is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO<sub>2</sub>-NH-R<sup>2</sup>, -NH-SO<sub>2</sub>-R<sup>4</sup>, -CO-NR<sup>2</sup>-R<sup>3</sup>, -NR<sup>2</sup>-CO-R<sup>4</sup>, -O-CO-R<sup>4</sup>, -CO-O-R<sup>2</sup>, -CO-R<sup>2</sup>, -SO<sub>3</sub>-R<sup>2</sup>, -SO<sub>2</sub>-R<sup>2</sup>, -SO-R<sup>4</sup>, -P(=O)(-O-R<sup>2</sup>)(-O-R<sup>3</sup>), -NR<sup>2</sup>-R<sup>3</sup>, -O-R<sup>2</sup>, -S-R<sup>2</sup>, -CN, -NO<sub>2</sub>, a halogen and -M-R<sup>2</sup>,

wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein X is O, S or NR<sup>5</sup>,

wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>5</sup> are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

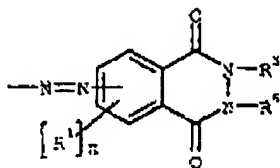
wherein R<sup>4</sup> is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R<sup>1</sup> to R<sup>5</sup> together represent the necessary atoms to form a cyclic structure.

29. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula

Application No. 10/531,627

Reply to Office Action



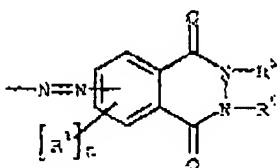
wherein  $n$  is 0, 1, 2 or 3,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-\text{SO}_2\text{-NH-R}^2$ ,  $-\text{NH-SO}_2\text{-R}^4$ ,  $-\text{CO-NR}^2\text{-R}^3$ ,  $-\text{NR}^2\text{-CO-R}^4$ ,  $-\text{O-CO-R}^4$ ,  $-\text{CO-O-R}^2$ ,  $-\text{CO-R}^2$ ,  $-\text{SO}_3\text{-R}^2$ ,  $-\text{SO}_2\text{-R}^2$ ,  $-\text{SO-R}^4$ ,  $-\text{P(=O)(-O-R}^2)(\text{-O-R}^3)$ ,  $-\text{NR}^2\text{-R}^3$ ,  $-\text{O-R}^2$ ,  $-\text{S-R}^2$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ , a halogen and  $-\text{M-R}^2$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^2$ ,  $R^3$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $R^1$  to  $R^4$  together represent the necessary atoms to form a cyclic structure, or wherein  $R^5$  and  $R^6$  together represent the necessary atoms to form a cyclic structure.

30. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-\text{N=N-Q}$  group comprises the following formula



wherein  $n$  is 0, 1, 2 or 3,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-\text{SO}_2\text{-NH-R}^2$ ,  $-\text{NH-SO}_2\text{-R}^4$ ,  $-\text{CO-NR}^2\text{-R}^3$ ,  $-\text{NR}^2\text{-CO-R}^4$ ,  $-\text{O-CO-R}^4$ ,  $-\text{CO-O-R}^2$ ,  $-\text{CO-R}^2$ ,  $-\text{SO}_3\text{-R}^2$ ,  $-\text{SO}_2\text{-R}^2$ ,  $-\text{SO-R}^4$ ,  $-\text{P(=O)(-O-R}^2)(\text{-O-R}^3)$ ,  $-\text{NR}^2\text{-R}^3$ ,  $-\text{O-R}^2$ ,  $-\text{S-R}^2$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ , a halogen and  $-\text{M-R}^2$ ,

wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

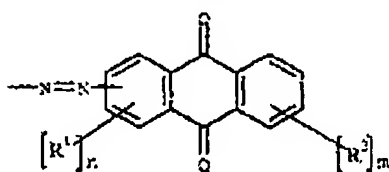
wherein  $R^2$ ,  $R^3$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

Application No. 10/531,627

Reply to Office Action

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  
 or wherein at least two groups selected from each  $R^1$  to  $R^4$  together represent the necessary atoms to form a cyclic structure,  
 or wherein  $R^5$  and  $R^6$  together represent the necessary atoms to form a cyclic structure.

31. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $n$  is 0, 1, 2 or 3,

wherein  $m$  is 0, 1, 2, 3 or 4,

wherein each  $R^1$  and  $R^2$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^3$ ,  $-NH-SO_2-R^3$ ,  $-CO-NR^3-R^4$ ,  $-NR^3-CO-R^3$ ,  $-O-CO-R^3$ ,  $-CO-O-R^3$ ,  $-CO-R^3$ ,  $-SO_3-R^3$ ,  $-SO_2-R^3$ ,  $-SO-R^3$ ,  $-P(=O)(-O-R^3)(-O-R^4)$ ,  $-NR^3-R^4$ ,  $-O-R^3$ ,  $-S-R^3$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^3$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^3$  and  $R^4$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^5$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

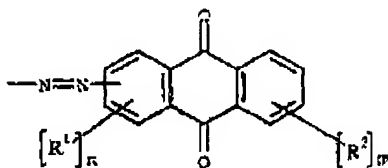
or wherein at least two groups selected from each  $R^1$  to  $R^5$  together represent the necessary atoms to form a cyclic structure.

32. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-N=N-Q$  group comprises the following formula



Application No. 10/531,627

Reply to Office Action



wherein n is 0, 1, 2 or 3,

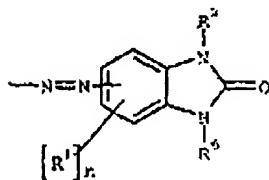
wherein m is 0, 1, 2, 3 or 4,

wherein each  $R^1$  and  $R^2$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^3$ ,  $-NH-SO_2-R^5$ ,  $-CO-NR^3-R^4$ ,  $-NR^3-CO-R^5$ ,  $-O-CO-R^5$ ,  $-CO-O-R^3$ ,  $-CO-R^3$ ,  $-SO_3-R^3$ ,  $-SO_2-R^3$ ,  $-SO-R^5$ ,  $-P(=O)(-O-R^3)(-O-R^4)$ ,  $-NR^3-R^4$ ,  $-O-R^3$ ,  $-S-R^3$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^3$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^3$  and  $R^4$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^5$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each  $R^1$  to  $R^5$  together represent the necessary atoms to form a cyclic structure.

33. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-N=N-Q$  group comprises the following formula



wherein n is 0, 1, 2 or 3,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

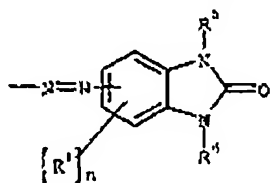
Application No. 10/531,627

Reply to Office Action

wherein  $R^2$ ,  $R^3$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $R^1$  to  $R^6$  together represent the necessary atoms to form a cyclic structure.

34. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-N=N-Q$  group comprises the following formula



wherein  $n$  is 0, 1, 2 or 3,

wherein each  $R^1$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^4$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^4$ ,  $-O-CO-R^4$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-SO_2-R^2$ ,  $-SO-R^4$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-NR^2-R^3$ ,  $-O-R^2$ ,  $-S-R^2$ ,  $-CN$ ,  $-NO_2$ , a halogen and  $-M-R^2$ ,

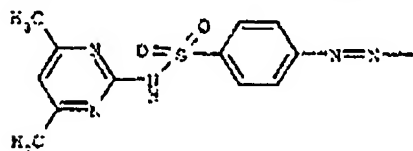
wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms,

wherein  $R^2$ ,  $R^3$ ,  $R^5$  and  $R^6$  are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein  $R^4$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

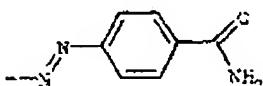
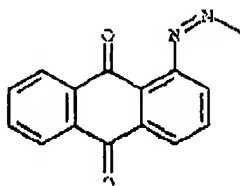
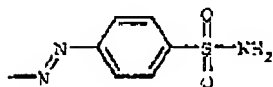
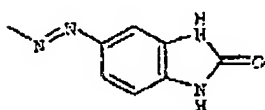
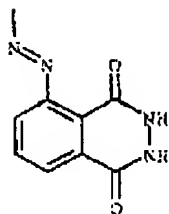
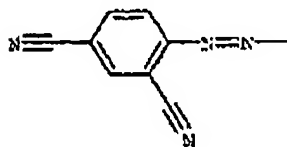
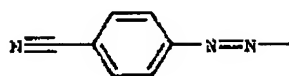
or wherein at least two groups selected from each  $R^1$  to  $R^6$  together represent the necessary atoms to form a cyclic structure.

35. (Previously Presented) The lithographic printing plate precursor according to claim 2 wherein the  $-N=N-Q$  group comprises one of the following formulae:

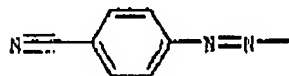
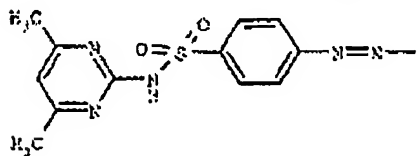


Application No. 10/531,627

Reply to Office Action

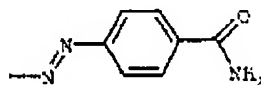
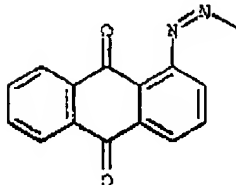
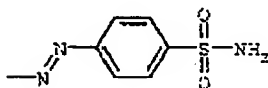
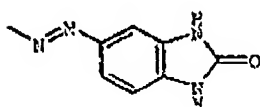
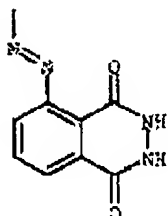
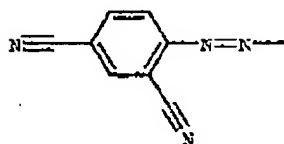


36. (Previously Presented) The lithographic printing plate precursor according to claim 3 wherein the  $-N=N-Q$  group comprises one of the following formulae:



Application No. 10/531,627

Reply to Office Action



37. (Previously Presented) The lithographic printing plate precursor according to claim 2, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

38. (Previously Presented) The lithographic printing plate precursor according to claim 3, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

39. (Previously Presented) The lithographic printing plate precursor according to claim 4, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

Application No. 10/531,627

Reply to Office Action

40. (Previously Presented) The lithographic printing plate precursor as amended in claim 5, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

41. (Previously Presented) The lithographic printing plate precursor according to claim 6, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

42. (Previously Presented) The lithographic printing plate precursor according to claim 7, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

43. (Previously Presented) The lithographic printing plate precursor according to claim 8, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

44. (Previously Presented) The lithographic printing plate precursor according to claim 9, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

45. (Previously Presented) The lithographic printing plate precursor according to claim 10, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

46. (Previously Presented) The lithographic printing plate precursor according to claim 11, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

47. (Previously Presented) The lithographic printing plate precursor according to claim 12, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

Application No. 10/531,627

Reply to Office Action

48. (Previously Presented) The lithographic printing plate precursor according to claim 2, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

49. (Previously Presented) The lithographic printing plate precursor according to claim 3, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

50. (Previously Presented) The lithographic printing plate precursor according to claim 4, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

51. (Previously Presented) The lithographic printing plate precursor according to claim 5, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

52. (Previously Presented) The lithographic printing plate precursor according to claim 6, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

53. (Previously Presented) The lithographic printing plate precursor according to claim 7, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

54. (Previously Presented) The lithographic printing plate precursor according to claim 8, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

Application No. 10/531,627

Reply to Office Action

55. (Previously Presented) The lithographic printing plate precursor according to claim 9, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

56. (Previously Presented) The lithographic printing plate precursor according to claim 10, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

57. (Previously Presented) The lithographic printing plate precursor according to claim 11, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

58. (Previously Presented) The lithographic printing plate precursor according to claim 12, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

59. (Previously Presented) A method for increasing the chemical resistance of a coating of a positive working heat-sensitive lithographic printing plate precursor, the method comprising providing a coating comprising:

a polymer which comprises a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure  $-N=N-Q$  wherein the  $-N=N-$  group is covalently bound to a carbon atom of the phenyl group and wherein Q is an aromatic group,

an infrared absorbing agent, and  
a dissolution inhibitor.

60. (Previously Presented) A method for increasing the chemical resistance of a coating of a negative working heat-sensitive lithographic printing plate, the method comprising providing a coating comprising:

a polymer which comprises a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure  $-N=N-Q$  wherein the  $-N=N-$  group is covalently bound is a carbon atom of the phenyl group and wherein Q is an aromatic group,

Application No. 10/531,627

Reply to Office Action

a latent Brönsted acid, and  
an acid-crosslinkable compound.

This listing of claims replaces all prior versions, and listings, of claims in the application.